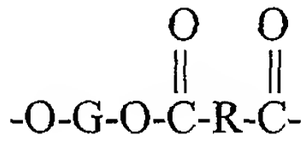
Claims

1. A method for the production of a wash-resistant bond between a film on basis of copolyetherester which is waterproof and water vapour permeable and at least one woven or knitted fabric as a substrate on basis of polyester wherein said film on basis of copolyetherester is manufactured with at least one film of a hot-melt adhesive on basis of hydrophilic copolyetherester to a laminate previously before being bonded to said substrate by means of a hot-melt adhesive on basis of copolyester and wherein said film of a hot-melt adhesive comprising hydrophilic copolyetheresters is formed from terephthalic acid and a combination of alcohols selected from the group consisting of butanediol, diethylene glycol, triethylene glycol and polyethylene glycols having a molecular weight of 600 to 4000 g/mol.

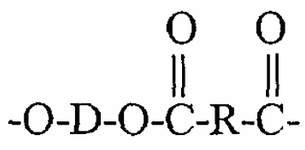
2. A method according to claim 1 wherein said diethylene glycol is present in 5 to 60 mol-%, said triethylene glycol is present in an amount between 5 and 60 mol-% and said triethylene glycol is present in an amount between 0 and 40 mol-% based on 100% acid and said high molecular weight polyethylene glycol is present ins an amount 75 to 60 mol-% based on the amount of total glycol.

3. A method according to claim 1 wherein said film which is waterproof and water vapour permeable comprises multiple recurring long-chain and short-chain units linked head to tail, said long chain units corresponding to formula (I).



(I)

and said short claim units correspond to formula (II)



(II)

wherein

G represents a bivalent residue derived by removal of terminal hydroxyl groups from at least one long-chain glycol having an average molecular weight of 600 to 6000 and an atomic ratio of carbon to oxygen between 2.0 and 4.3, wherein at least 20 wt.-% of said long-chain glycol have an atomic ratio of carbon to oxygen between 2.0 and 2.4 and are 15 to 50 wt.-% of said copolyetherester,

R represents a bivalent residue derived by removal of carboxyl groups from at least one dicarboxylic acid of a molecular weight of less than 300, and

D represents a bivalent residue derived by removal of hydroxyl groups from at least one diol of a molecular weight of less than 250, wherein at least 80 mol-% of used dicarboxylic acid consist of terephthalic acid or ester-forming equivalents thereof and at least 80 mol-% of said diol have said small molecular weight consisting of 1,4-butanediol or ester-forming equivalents therefore, the sum of mole percents of said dicarboxylic acid which does not represent terephthalic acid or ester-forming equivalents thereof and of said diol having a small molecular weight which does not represent 1,4-butanediol or ester-forming equivalents thereof being not more than 20 % and wherein said short-chain units of ester can be 40 to 80 wt.-% of said copolyetherester.

4. A method according to claim 1 wherein said substrate is selected from the group consisting of non-woven fabric, knitted fabric and lining fabric.

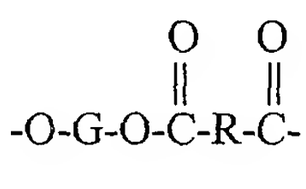
5. Amethod according to claim 1 wherein said film of a hot melt adhesive on basis of copolyetherester has a melting point of at least 150° C.

6. A method according to claim 1 wherein said hot melt adhesive on basis of copolyester is applied using a method selected from the group consisting of paste dot coating, powder dot coating and scatter coating.

7. A fabric comprising at least one substrate and laminate in form of a film on basis of copolyetherester which is waterproof and permeable to water vapour in combination with at least one film of a hot-melt adhesive on basis of hydrophilic copolyetherester, said substrate and laminante being adhered using a hot-melt adhesive.

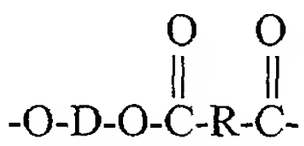
8. A fabric according to claim 7 which conforms to the bluesign ® standard.

9. A fabric according to claim 7 wherein said waterproof and water vapour permeable layers is a copolyetherester comprising multiple recurring long-chain and short-chain units linked head to tail, said long chain units corresponding to formula (I).



(I)

and said short claim units correspond to formula (II)



(II)

wherein

G represents a bivalent residue derived by removal of terminal hydroxyl groups, from at least one long-chain glycol having an average molecular weight of 600 to 6000 and an atomic ratio of carbon to oxygen between 2.0 and 4.3, wherein at least 20 wt.-% of said long-chain glycol have an atomic ratio of carbon to oxygen between 2.0 and 2.4 and are 15 to 50 wt.-% of said copolyetherester,

R represents a bivalent residue derived by removal of carboxyl groups from at least one dicarboxylic acid of a molecular weight of less than 300, and

D represents a bivalent residue derived by removal of hydroxyl groups from at least one diol of a molecular weight of less than 250, wherein at least 80 mol-% of used dicarboxylic acid consist of terephthalic acid or ester-forming equivalents thereof and at least 80 mol-% of said diol have said small molecular weight consisting of 1,4-butanediol or ester-forming equivalents therefore, the sum of mole percents of said dicarboxylic acid which does not represent terephthalic acid or ester-forming equivalents thereof and of said diol having a small molecular weight which does not represent 1,4-butanediol or ester-forming equivalents thereof being not more than 20 % and wherein said short-chain units of ester can be 40 to 80 wt.-% of said copolyetherester.